

MANAGEMENT OF CANCERWITH MUNZIJ AND MUS'HIL THERAPY: A REGIMEN OF *ILAJ* BIT TADBEER (REGIMENAL THERAPY) IN UNANI SYSTEM OF MEDICINE

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ABSTRACT

Cancer is one of the most perplexing diseases which have been plaguing worldwide and had been accounted for 8.2 million of all deaths in 2012 as reported by World Health Organization (WHO) in 2014. According to WHO, it is the second leading cause of death in the developing countries after cardiovascular diseases. American Cancer Society defines it as "a large group of diseases, all characterized by uncontrolled growth and spread of abnormal cells". Its etiology is still not completely understood but certain dietary factors and environmental agents act on the genetic material in cells leading to the chemical changes that may initiate the progression of abnormal cell mass. The Sartan (cancer) is well described in the Unani Classical Medical Literature as "Sartan" or "Warm-e-Sulb-Saudavi". While going through the literature review of various compendiums written by Unani physicians, it is clear that this system of medicine had vast knowledge about sartan. In spite of the present advanced treatment options there is no effective and satisfactory treatment for cancer. The treatment besides being very expensive, are associated with serious side effects and morbidity due to their toxic effects. The search still continues for a treatment that has minimal side effects and is cost effective.

Unani medicine has produced many useful leads in developing medications for chronic systemic diseases as proved by numerous clinical trials. Therefore, a Unani alternative approach is being explored in the light of classical Unani literature for the management of *Sartan* as a safe and efficacious treatment option. The role of *Munzij and Mus'hil* therapy, which isan important part of *Ilaj bit Tadbeer* (Regimenal therapy)in treating such disorders, is well recognized in Unani classical literature.

Key Words: Cancer, Unani Medicine, Sartan, Ilaj bit tadbeer, Munzij, Mus'hil

INTRODUCTION

Cancer is a leading cause of death worldwide despite of its development in prevention, diagnosis and treatment. It is the second leading cause of death after cardiovascular diseases, in the developing countries ^{1,2,3}. World Health Organization (WHO) in 2014 reported that cancer has accounted for 8.2 million deaths i.e. around 13% of all deaths in 2012^{1,2,4}. The International Agency for Research on Cancer (IARC) has estimated that there will be 14.1 million new cancer cases each year⁵. In developing countries the most common carcinomas are lung, breast and colorectal cancers which cause more burden than the infectious diseases. The most frequently diagnosed cancers worldwide are the breast cancer in females and lung cancer in males. While, the breast cancer comprises almost one third of all malignancies in females with 1.38

million new cases and 458,000 deaths in 2008 ^{6,7,8}. The most frequent cancer among malesin developed countries is lung cancer which is preceded by prostate cancer ^{6,9,10}. Dikshit et al reported in 2012 that approximately 5 lakh deaths were due to cancer in 2010 in India ².

The American Cancer Society defines cancer as "a large group of diseases all characterized by uncontrolled growth and spread of abnormal cells" ⁴. Whereas, Hilal Zaid et al in 2010 defines it as a cohort of diseases characterized by uncontrolled cell proliferation and ability to invade other tissues through direct cell migration or through the blood and lymph systems¹¹.

Cancer is not a new disease but, a new name for an old malady. The word cancer came from Greek word, *karkinos*¹². Cancer

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was described as a crablike disease by eminent Greek physician *Hippocrates*, who observed that it spread all through the body and ultimately bring the life to an end^{10, 13}. The history of Sartan is as old as the history of human being. The earliest evidence of human bone cancer was found in mummies and ancient manuscripts in ancient Egypt about 1600 B.C. Hippocratic School is thought to be the first to document Greek ideas about cancer14. The world's oldest recorded case of breast cancer hails from ancient Egypt in 1500 BC there was no treatment for the cancer other than palliative treatment¹². According to old scripts the surface tumors were surgically removed in a similar manner as they are removed today. The life in cancer patients can be extended due to early identification and treatment which had been realized and emphasized by well-known Unani physicians (Razi; Abulcasis and Ibn-e-Sina) that the cure is most likely if the cancer was identified as its earlier stage otherwise it is difficult to treat¹⁴¹⁵.

Etiology of cancer with the most accepted theory

The etiology of Cancer is not completely understood but certain theories suggest that certain dietary factors and environmental agents such as smoking and sunlight act on the genetic material in cells, leading to the chemical changes which may initiate the progression of an abnormal cells mass proliferation⁶. The principal environmental agents that cause cancer are ionizing radiation, tumor viruses, carcinogenic chemicals and possibly, xenoestrogens. Whereas, Population aging and the unsteady growth in population, as well as a sudden increase in adoption of cancer-associated lifestyle alteration including smoking, "westernized" diets and physical inactivity is continuously further increasing the burden of cancer⁹. Till now, the most prominent and well accepted etiological theory for cancer suggests that somewhere in DNA structure there is a gene, called an oncogene, that produces an abnormal or mutant cell^{4,10}.

Cancer in view of classical Unani literature

The description of *Sartan* (cancer) in the *Unani* (Greco-Arabian) system of medicine is suggested its acquaintance in ancient times (131-200 A.D). It is mostly described under the heading of "*Sartan*" which means "a crab" whereas some others Unani scholars described *Sartan* as "*Warm-e-Sulb-Saudavi*" a type of *Saudavi* swelling ^{14,16}. Other terms for tumors, less often used in ancient literature are *Scirrhus; Struma; Melicerides; Condyloma; Tuberculoma; Occalescit and Carcinode* ^{13,17,18,19}. Samarqandi discussed the different types of sartan, as Sartan Bashra (skin cancer), Sartan Akkal (corrosive cancer), Sartan Mukhaati (cancer of mucosa) and Sartan Gudhi (lymph cancer)^{20,21}.

Hippocrates' Humoral theory states that the human body consists of four humors (body fluids) viz. blood, phlegm,

yellow bile and black bile. Any imbalance in these body fluids results in a disease condition. "Warm-e-Sulb-Sauda-vi" (Cancer) has also been attributed to the combustion and imbalance of certain humors in the body that leads to the accumulation of excess of black bile in a particular organ site 12,20,21,22.

Galen (130-200AD) extended Hippocrates' definitions of cancer and he further classified tumors into three major types, (i) *Onkoi* (lumps or masses) (ii) *Karkinomas* (non-ulcerating cancers) and (iii) *Karkinos* (malignant ulcers) ^{14,23}.Sartan which is caused by *Madda-e-Saudavi-Safrawi* is ulcerative type, while *sartan* which is caused by combustion of *Madda-e-Balghum-wa-Safrawi* is non-ulcerative type. Though, this concept is not universal, as sometimes the above type may progress to ulcerative. The scholars state that the ulcerative type is incurable and fatal ²⁴.

Ancient Unani physicians had very vast knowledge of sartan and they very successfully mentioned the sign and symptoms; etiology; types; pathogenesis; differential diagnosis; principles of treatment; treatment along with Dietary regimen in detail^{15,37}, as evident from various compendiums written by eminent Unani physicians e.g. *Hippocrates* (460–377 B.C), *Dioscorides* (40-90 AD), *Galen* (129-200AD), *Tabri* (839–923 AD), *Razi* (854–925AD), *Majoosi* (930-994AD), *Ibn-e-Sina* (980-1037AD), *Ibn Zuhr* (1094–1162AD), *Jurjani* (1042-1136AD), *Samarqandi* (13th-centuryAD), *Ajmal Khan* (1868-1927AD). The management of cancer hasalso been well elaborated according to pathogenesis and stages of disease. The disease has been classified into five stages and is being treated according to these stages which are mentioned as follows¹⁵:

- 1. Stage of ibtida'-e- marhala (Initial stage)
- Stage of sartan-e-ghair-mutaqarrah (Non-ulcerative stage)
- 3. Stage of sartan-e- mutaqarrah (Ulcerative stage)
- 4. Stage of sartan-e-Khafii (hidden cancer)

Unani physicians have discussed many treatment regimens based on their successful experiences in their respective compendium to treat and cure this fatal and incurable condition. *Razi* (854-925AD), described *Sartan* as a "*Marz-e-Muhlik*" (fatal disease) in his book *Kitab Al-Mansoori*^{23,25}.

Moreover, *Razi, Ibn-Sina* and *Majoosi* in *Kitabul Hawi, Al Qanoon Fit Tib* and *Kamil-us-Sana* respectively discussed the most common sites of *Sartan*^{14,24,26}. They further stated that breast cancer is the most common *sartan* in women while Urethra and testes are the commonest sites for cancer in men.

As per Unani concept cancer is essentially a disease of the black bile humor. According to Avicenna, cancer is a tumor arising from "burning" of the black bile humor. By 'burning' it is meant that the increase of intrinsic heat has become pathological. The cancerous tumor is usually differentiated from benign tumors by the signs of pain, some degree of throbbing, rapid increase in size and acuteness. Cancer is a multi-factorial disease and Unani philosophy is that cancer is the end stage of the degeneration of the metabolic efficiency of the body, the extinguish of the innate heat, primarily by incorrect diet and other imbalances in various aspects of the patient's life, usually occurring over a long period of time.

Since *sartan* is a disease of *Black Bile Humor (Sauda)*. It can occur due to imbalance in the black bile humor by excess production of black bile itself or it may take place due to one or more humors (Balgham; Safra) out of balance along with the black bile. Sometimes any abnormal change occurring in the black bile (*sauda*) may be a leading cause for sartan. There are five types of abnormal changes occur in *sauda*- excess production of normal *sauda*, burning of normal *sauda* in to abnormal *sauda*, formation of *sauda* due to combustion of phlegm and formation of *sauda* due to combustion of *safra* (bile)^{20,21,22,27}.

It is known fact that the majority of the malignant tumor occurs in incessantly renewing tissues swelling is a manifestation of this black bile substance with the organ. Avicenna notes that cancer occurs mostly in hollow organs. It is also common in the nerves, muscles, tendons, and lymph.

In early stage of disease its size is about the size of almond or may be shorter, thereafter as the disease progresses the size of tumor increases and appears as a red and white development along with greenish spreading out prominent veins. While its rootsare obscured in the body like crabs' tracks and are very strong enough which is an important characteristic of this condition. Cancerous tumors send out crab-like "tracks," and there is a trend toward blackness, green, and heat. Owing to this character it is named as "*Sartan*" which means "a crab" (a cancer)^{21,24}.

Management of Cancer

Unani medicine, one of the major traditional forms of medical practice in India, has produced many useful leads in developing medications for chronic systemic diseases ³as proved by numerous clinical trials. Galen explained that cancer is a metabolic disease and it should be treated systemically rather than locally ²⁸. Hence, an alternative approach-"Munzij and Mus'hil therapy: an important part of *Ilaj bit Tadbeer (Regimental therapy)*" is being explored in light of Unani classical literature for the management of <u>Sartan</u> as a better, safe and efficacious substitute to the existing treatment options.

In Unani system of medicine, treatment is carried out in three ways, or there are three principal modes of treatment in Unani system of medicine. These are³⁴:

- 1. *Ilaj bit Tadbeer wa Taghziya* (Regimental and dietotherapy)
- 2. *Ilaj bid Dawa* (Pharmacotherapy)
- 3. *Ilaj bil Yad* (Surgery)

Nuzj and *Is'hal* is an important part of Ilaj bit Tadbeer (Regimental therapy).

In his book entitled "Methods of Treatment", Galen has hypothesized that cancer is a disease associated with black bile humor which is hardly diagnosed at early stages.

In order to treat cancer, Galen has proposed that removal of black bile from the body by means of administering an appropriate purgative, and then the production and accumulation of black bile in vessels should be prevented as far as possible. In case this method is not possible then black bile should be removed from the body at regular time points.

Following principles are to be followed while treating the patients of Cancer (*Sartan*) by *Taadil-e-Mizaj* (correction of temperament) and *Tanqia-e-Mawad* (cleansing of morbid material) with reference to Nuzj and Is'hal therapy in our classical literature as:

Taadil-e-Mizaj (correction of temperament)

In cancer there is imbalance in Humour called black bile (Sauda) which has cold and dry temperament and therefore, by adopting the measures of *Ilaj-bil-zid* the drugs and food having hot and wet temperament are given. The diet should be saaleh (healthy), jaiyyadul kaimus (easily digestable) latif (light)having cold and wet temperament butin small quantity. For example: Soups of lean meat, all dry fruits, Kaddu (Cucurbita maxima), Khurfa (Portulaccaoleracea), Cholaee (Amaranthus polygamus), Bathua (Chenopodiumalbum), Kheera (Cucumis sativus), pomegranate, spinach, Badaam(Prunus amygdalus,)Ma-ul Jubn (whey water), Maus-Shaeer (barley water), Mufarreh Mashroobaat (exhilarant fruit juices) like Sharbat-e-saib (Apple juice) along with arq-e-baid-Mushk-wa-arq-e-Neelofar is very effective as a cardiac tonic. These mentioned foods and drinks reduce the excess production and accumulation of sauda and also refresh the body. Strengthening of the affected organ by the aromatic drugs have been well mentioned in Unani classical literature^{20, 21,29}.

Tanqia-e-Mawad (Cleansing of morbid matter) by Munzij and Mus'hil therapy

The concept of *Nuzj* and *Is'hal* in the treatment of the diseases is indeed archaic. *Jalinoos, RabbanTabri, Razi* have given the importance of *Munzij and mus'hil therapy* in their literature, and they themselves treated patients successfully with this mode of treatment. Kabiruddin³⁰ referring *Gilani*

states that when the morbid materials are extracted from intestine or the nearby structures, then it is called as Talyeen (Laxation) and when the morbid materials are extracted from the vessels and other deeper tissues, then it is known as Is'hal (Purgation). The entire regimen consists of two phases: first Nuzj (Concoction) followed by Is'hal (Purgation).

Nuzj (Concoction)is a method by which morbid materials are modified to a form which could be easily evacuated with the help of Mus'hilat (Purgatives). In this way, viscous humors are diluted enough and vice versa for their easy expulsion out of the body. Nuzj (Concoction) is essential in case of all chronic disorders as well as the diseases having duration of more than 40 days. As per the line of treatment given in Unani classical books, Nuzj (Concoction) is a requisite in chronic diseases, but optional in acute diseases depending upon the severity and acuteness of the condition^{30,31}. In cases of phlegmatic diseases, it is mandatory that purgation should be preceded with Nuzj (Concoction). It is optional in bilious diseases. It is not required in sanguinous diseases. In case of sanguinous diseases, moadillat-e-dam-Advia is given instead of Munzij drugs³⁰.

The duration of *Nuzj* varies with different humors:

•	Safra-e-khalis	3days
•	Safra-e-Ghair-khalis	5days
•	Balghum Raqeeq	5days
•	Balghum Ghaleez	12days
•	Sauda-e-Khalis	15-40days

Soon after the signs of *Nuzj* completion appear, the *Mus'hil* (Purgative) drugs are added to the Munzij drugs^{24,30}.

Mus 'hil (Purgative) drugs bring about the <u>Is 'hal</u> (Purgation) of the morbid humors (phlegm, sauda and safra) that have been made able to evacuate by the action of Munzijat. It is used to eliminate and evacuate out the morbid materials responsible for the disease.

Depending upon the mode of action, the Mus'hilat (Purgatives) is of different types:

According to the severity of actions:

Mus'hilat-e-Khafeef(Mild purgatives): these are the drugs which simply increase the peristaltic movements of the intestine, but do not produce spasmodic pain in abdomen and produce semi loose motions.

For example: *Tubud* (Ipomoeae turpethum); *Sana-e-Makki* (Casia angustifolia).

Mus'hilat-e-Shadeed(Strong purgatives): these are the drugs which increase the peristaltic movements of the drugs and bring watery stools without causing the spasmodic pain.

According to the mode of actions:

Mus'hil bit-taleen: The drugs which increase the peristaltic movements of the intestine in such a way that they produce laxative effects causing semi soft motions. For example: Turanjbeen; Sher-e-khisht.

- Mus'hil bil Izlaq: Aloobukhara; Sapistaan; Tukhm-e-Khatmi.
- Mus 'hil-e-bil-jila: Boora Armani.
- Mus'hil-e-bil-quwatl-Mus'hila: Sagmonia.
- Mus'hil-e-bil-Aseer: Halailajat; Sharbat-e-ward-mukarar

After the process of purgation has occurred, the drugs for *Tabreed* are given. Physicians in ancient times used to advise *Loab-e-Aspaghol* in the evening for people of hot temperament; *Tukhm-e-rehaan* for moderate temperament and *Tukhm-e-tera-tezak* for cold temperament, but physicians of present era advise *Tabreed* daily after purgation. The commonly used formulation for *Tabreed* is as follows:

Khameera Gaojaban (7gm)with Loab-e-Behdana (3gm), Sheera Unnab(5 piece) in Arq-e- Gaojaban(100 ml) and Sharbat-e-Banafsha (20ml) is given in the morning²¹.

For *Khilt-e-sauda* commonly used Unani single drugs as *Moad'dilat* (Alterative); *Munzijat* (Concoctive) and *Mus'hilat* (Purgative) ³².

Moad'dil (Alterative Sauda drugs)30,36:

Ustookhudoos (*Levandula Stoechas*); baada'ward (*Volutarella Divaricate*); baaddranjboya (*Nepata Puderalis*); parshiyaoshah(*Adiuntun capillus-veneris*); Sapistaan (*Cordia dichotoma*); *Shahatra (Fumaria parviflora)*; Unnab (*Zizyphus vulgaris*); Gao-zaban (*Borago officinalis*); Maweez-e-munaqa (Delphinium staphysagria)etc.

Munzij (Concoctive sauda drugs):

Ustookhudoos (Levandula Stoechas)s; baada'ward (Volutarella Divaricate); baaddranjboya (Nepata Puderalis); parshiyaoshah(Adiuntun capillus-veneris); Asl-us-soosmuqashar(Glycyrrhiza glabra); badiyan (Foeniculum vulgare); Barg-e- Shahatra (Fumariaparviflora); Turanjbeen (Alhagi pseudalhagi); Sapistaan (Cordia dichotoma); Unnab (Zizyphus vulgaris); Gao-zaban (Borago officinalis); Gulgand etc.

Mus'hil (Purgative sauda drugs)³⁵:

Aamla (Emblica officinalis); Ustookhudoos (*Levandula Stoechas*); Afteemoon (*Cuscuta reflexa*); Ayaraj-e-feyqra (*Aloe barbadensis*); Burg-e- baaddranjboya (*Nepata Puderalis*); Burg-e-Sana-e-Makki (*Cassia angustifolia*); Bisfayajh (Polypodium *vulgare*); Tukhm-e-Baalangoo; Tukhm-e-Kasoos (Seeds of Vitis carnosa); Hub-ul-Neel; Reywandh Khastaayee; Ga'rayqoon (*Agaricus alba*); Gul-e-gao-zaban

(Flowers of Borago officinalis); Halela siyah (Terminallia bellerica); Halela qabooli (Terminalia chebula) etc.

Some Important Unani prescriptions on munzij and mus'hil therapy for cancer:

- 1. Unnab (Zizyphus vulgaris)(5 piece), Gao-zaban (Borago officinalis)(7 gm), Shahatra (Fumaria parviflora)(7mg), Baaddranjboya (Nepata Puderalis) (7gm), Badiyan (Foeniculum vulgare)(7 gm), Asl-ussoos-muqashar (Glycyrrhiza glabra)(5 gm). The above mentioned drugs are soaked in hot water overnight and after sieving it Gulgand (20 gm) or
 - The above mentioned drugs are soaked in hot water overnight and after sieving it *Gulqand* (20 gm) or *Turanjbeen* (Alhagi pseudalhagi) (20 gm) is added to it²⁴.
- Bisfayajh (Polypodium vulgare); Ustookhudoos (Levandula Stoechas); Maweez-e-munaqa (Delphinium staphysagria); badiyan (Foeniculum vulgare); Gaozaban (Borago officinalis); baaddranjboya (Nepata Puderalis); A'lobukhara; Afteemoon (Cuscuta reflexa) along with Turanjbeen (Alhagi pseudalhagi)²¹.
- 3. Maweez-e-munaqa (Delphinium staphysagria)(9 piece); Badiyan (Foeniculum vulgare)(5 gm); Asl-ussoos-muqashar (Glycyrrhiza glabra)(7 gm); Parshiyaoshah (Adiuntun capillus-veneris) (7 gm); Anjeere-zard (Ficus carica) (2 pieces)

 The decoction of the above mentioned drug incorpo-
 - The decoction of the above mentioned drug incorporated with Gulqand Asli (40gm)²⁴.
- 4. Unnab (Zizyphus vulgaris)(5 piece); Gul-e-Banafsha (Flowers of Viola odorata) (7 gm); Gul-e-Neelofar (7 gm); Shahatra (Fumaria parviflora)(7 gm); Tukhm-e-Kasni-Neem-Kofta (Chicorium intybus) (7 gm); Beekh-e-Kasni (root of Chicorium intybus) (7 gm); Gul-e-Surkh(Rosa domescus)²⁴
 - The drugs are soaked in hot water overnight and after sieving it *Sharbat-e-Neelofar* (20ml) or Sakbeenajh (20 gm) is added to it.
- 5. Ayaraj-e-feyqra (Aloe barbadensis); Turbud (Ipomoea Turpethum) (each 3.5 gm); Hub-ul-Neel; Anisoon (Pimpinella anisum) (each 1.75 gm); Saqmonia Biryan; Kateera (Cochlospermum religiosum) (each 6 mg), Tukhm-e-Hanzal (seeds of Citrullus colocynthisschred); Ga'rayqoon (Agaricus alba); Sa'lab misri (each 3 mg)²⁴
 - Tablets are made from the Powder of the above mentioned drugs with Arq-e-Gulab.
 - Dose: 2-4 tablets
- Afteemoon (Cuscuta reflexa), Bisfayajh (Polypodium vulgare), Ustookhudoos (Levandula Stoechas), Ga'rayqoon (Agaricus alba), Ayaraj-e-feyqra (Aloe barbadensis), Turbud (Ipomoea Turpethum)²².
- Ayarjaatlike Ayaraj-e-feyqra (Aloe barbadensis) or Ayaraj-e- Jalinoos or Ayaraj-e-Roofas to eliminate the morbid Sauda and for Taadil-e-Mizaj²¹.
- 8. Ayaraj-e-feyqra (Aloe barbadensis) (4.5 gm); Turbud muqashar (Ipomoea Turpethum) (9 gm); Hub-

ul-Neel(1 gm); Afyun (*Papaver somniferum*)(1 gm); Ga'rayqoon (*Agaricus alba*)(1 gm); Shem-e-Hanzal (*Citrullus colocynthisschred*)(1 gm); Samagh-e-Arabi (*Acacia Arabica*)(4mg); Kateera (*Cochlospermum religiosum*)(4gm); Gul-e-Surkh(*Rosa domescus*) (4 mg); Namak-e-Hindi (4mg); Mastaghi (*Pistacia lentiscus*)(4mg); Muqil (Commiphora Mukul)(4.5mg); and Rogan Badam (*Prunus amygdalus*)(1mg).

Dose: Half tablet should be administered in the night and remaining half in morning but in empty stomach.

CONCLUSION

Cancer is the second leading cause of death in the developing countries after cardiovascular diseases. Its etiology is still not completely understood. The knowledge of Sartan (cancer) in the Unani system of medicine is well described in the Unani Classical Medical Literature as "Sartan" or "Warm-e-Sulb-Saudavi". Unani System of Medicine has produced many useful leads in developing medications for chronic systemic diseases as proved by numerous clinical trials. The eminent Unani physicians like Hippocrates, Avicenna, Rhazes and Al-Zahrawi had well described the information about the cancer and the principles laid down by them were well recognized in medical science and influenced the medical world for many centuries. Hippocratic School is thought to be the first to document Greek ideas about cancer. According to inscriptions, surface tumors were surgically removed in a similar manner as they are removed today. Early identification and treatment had been realized and emphasized by eminent Unani physicians (Razi; Abulcasis and Ibn-e-Sina) that the cure is most likely if the cancer was identified as its earlier stage otherwise it is difficult to treat. The present treatments for cancer include surgery, radiation, and chemotherapy with a goal to eradicate as many cancer cells as possible. In spite of all these, there is still no cure and besides being enormously expensive, these medicines are associated with serious side effects and morbidity due to their toxic effects. In such a scenario, the search continues for an ideal treatment that has minimal side effects and is cost effective. Unani Medicine might be a potential safe treatment for cancer. Thus, a Unani alternative approach-"Munzij and Mus'hil therapy: an important part of Ilaj bit Tadbeer (Regimenal therapy)" can be explored for the management of Sartan as a better, safe and efficacious treatment option.

REFERENCES

- Emel Tasci-Duran; Sukran Koc et al: Turkish Social Attitudes towards Cancer Prevention: a Health Belief Model Study. Asian Pac J Cancer Prev. 2014; 15 (18), 7935-7940.
- K.P. Asha, D. Indu, M.S. Roopasree et al: Clinical Symptoms and Psychosocial Problems of Cancer Patients Attending Pain

- and Palliative Care Clinic. Journal of Academia and Industrial Research (JAIR). 10 March 2014; 2(10); pp. 2278-5213.
- Sunyana Jain; Vikrant Gill et al: Ayurvedic medicines in the treatment of cancer. Journal of Chinese Integrative Medicine, November, 2009, Vol 7(11):1096-1099.
- Brain Luke Seaward: Managing stress: principles and strategies for health and well being-5th edition. Jones and Bartlett Publishers Canada-2006.pp.73-74.
- Gilly Arthurs; Janice Simpson et al: The effectiveness of therapeutic patient education on adherence to oral anti-cancer medicines in adult cancer patients 18 years and older in an ambulatory care setting: a systematic review protocol. JBI Database of Systematic Reviews & Implementation Reports 2014;12(8) 64 77.
- Bernard W Stewart and Paul Kleihues: World health organization (WHO: OMS): International agency for research on cancer: World cancer report. IARC Press, Lyon 2003, pp 182-186.
- Laura C. Dale and Carolyn C. Gotay: The Relationship between Complementary and Alternative Medicine Use and Breast Cancer Early Detection: A Critical Review. Evidence-Based Complementary and Alternative Medicine, 30 November, 2012, pp.1-10.
- Rodney C. Richie and John O. Swanson: Breast Cancer: A Review of the Literature. J Insur Med 2003; 35:85–101.
- 9. Ahmedin Jemal; Freddie Bray et al: Global Cancer Statistics. CA CANCER J CLIN 2011; 61:69–90.
- 10. Gordon Edlin and Eric Golanty: Health and Wellness-9th edition. Jones and Bartlett Publishers Canada; 2007; pp.291-309.
- Hilal Zaid and Bashar Saad: Cancer treatment in the Arab-Islamic medicine: Integration of tradition with modern experimental trails. 2010: 14: 13-30.
- Akulapalli Sudhakar: History of Cancer, Ancient and Modern Treatment Methods. J Cancer Sci Ther. 2009 December 1; 1(2): 1–4.
- Hippocrates, Ancient medicine. Airs, waters and places. Epidemics 1 and 3. The oath. Percepts. Nutriment (Transl. W.H.S. Jones, 1923). London: W. Heinemann. Loeb Classical Library.
- Yasmeen Shamshi and Rais-ur-Rehman: Concept of cancer in Greco-Roman and Islamic Medicine. International Journal on Biological Sciences (IJBS); 2012; Vol. III (1); pp.63-67.
- Hkm Asher Qadeer: Tib Unani aur Sartan. Pandrah Rozah-Tibb-E-Mashriq: Delhi: Cancer Special Issue. New public press, Gali kasim jaan, Delhi-6, December, 2002; pp.76-79.
- Sadia Nikhat; R. Anjum et al: Perceived risk of cervical cancer among women: A hospital based study. IJUM.2014 January to June 7 (1): 43-48.
- 17. Celsus, De Medicina (trans. W. G. Spencer, 1938). London: W. Heinemann. Loeb Classical Library. Vol. II and III.
- 18. Galen, De tumoribus praeter naturam (transl. J. Reedy, 1975). ClioMedica 10 (3):2; 1975; pp.27-238.
- Soranus' Gynecology (transl. O. Temkin, 1956). Baltimore and London: The John Hopkins University press. 1956.

- Allama Najeebuddin Samarqandi: Sharah-e-Asbaab Tarjumah Kabeer: Vol- I (Urdu translation by Hkm Kabiruddin). Ejaj Publishing House, Darya Ganj, New Delhi-110002, 2007, pp.21
- Allama Najeebuddin Samarqandi: Sharah-e-Asbaab Tarjumah Kabeer: Vol- III and IV (Urdu translation by Hkm Kabiruddin). Ejaj Publishing House, Darya Ganj, New Delhi-110002, 2007, pp.223-226.
- Ahteshamul-Haq-Quraeishi: Cancer ya Sartan: ek Ta'ruf. Pandhra Rozah-Tibb-E-Mashriq: Delhi: Cancer Special Issue. New public press, Gali kasim jaan, Delhi-6, December, 2002; pp.72
- 23. Diamandopoulos. G. T: Cancer: an historical perspective. Anticancer Res. 1996; 16(4A):1595-1602.
- Hkm Sayed Kamaluddin Hussain Hamdani: Cancer. Pandhra Rozah-Tibb-E-Mashriq: Delhi: Cancer Special Issue. New public press, Gali kasim jaan, Delhi-6, December, 2002; pp.63-66
- Weiss. L: Early concepts of cancer. Cancer Metast Rev.2000; 19 (3-4):215-217.
- Razi Z (2004): Kitabul Hawi fit Tib (Urdu translation by CCRUM); Vol II; Seema Offset press; Delhi.
- Hkm. Akbar Arzani: Mizan Al-Tib (Urdu translation, by Hkm. Kabiruddin). Published by Idarah Kitab-Us-Shifa New Delhi. 2002: 22, 34, 39, and 246.
- 28. Pervan V; Cohen LH; Jaftha T: Oncology for health care professionals. Cape town: Juta and Co; 1995; pp.5-6.
- Hkm Khursheed Ahmad Shafkat Azmi: Sartan aur Tibb Unani: Moalijatee imkaanat ka ijmali jaayezha. Pandhra Rozah-Tibb-E-Mashriq: Delhi: Cancer Special Issue. New public press, Gali kasim jaan, Delhi-6, December, 2002, pp.36-37;38; 41; 57.
- 30. Kabiruddin M (N.A): Kulliyat-e-Advia. Idarah Tameer-e-Tib, Ghazni street, Lahore; pp.419.
- 31. Kamaluddin S (N.A): Usool-e-Tibb- Edition II, NCPUL, New Delhi; pp.440-455.
- Waseem Ahmad Aazmi: Kulliyat-e-Advia. Aijaz Publishing House 2861, Kucha Chelan, Darya Ganj, New Delhi-110002; 1997; pp.103-104.
- 33. Hkm Sayed Ishtiyaq Ahmed: Introduction to Al-Umur-Al-Tabiyah: Principles of human physiology in Tibb. Saini Printers, Pahari Dhiraj, Delhi-6, 1980, pp.3-4.
- Dharmananda S: Unani medicine with reference to Hamdard of Pakistan and India. Retrieved from http://www.itmonline.org/ arts/unani.htm.
- Ibn-Sina: Al-Qanoon Fit tib, Urdu translation, by Hkm. Ghulam Hussain Kantoori. Published by Idarah Kitab-Us-Shifa New Delhi.2010; 4:1278-1280.
- Abu Al-Mansurul Hasan Qamri. Kitab Gana Muna. Urdu Translation, Published by Central Council for Research in Unani Medicine. Ministry of Health & Family Welfare. Govt. of India New Delhi. 2008; 508-510.
- 37. Kausar Chand Puri: Tarakki Urdu Beuru, New Delhi, 1984, pp.67; 86-87.